

Burning Issues: rules, smoke impacts, health, & alternatives



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DEQ Authorities

- ▣ IDAPA 39-105(3)(d)
Safeguard air quality by limiting and controlling
the emission of air contaminants



Rules for Control of Open Burning

- ▣ IDAPA 58.01.01.600-617
- ▣ These sections explain the purpose of the rules, the restrictions on material types that may not be burned, and the categories of allowable burning.
- ▣ Section 614 addresses prescribed burning and smoke management.

Prescribed Burning

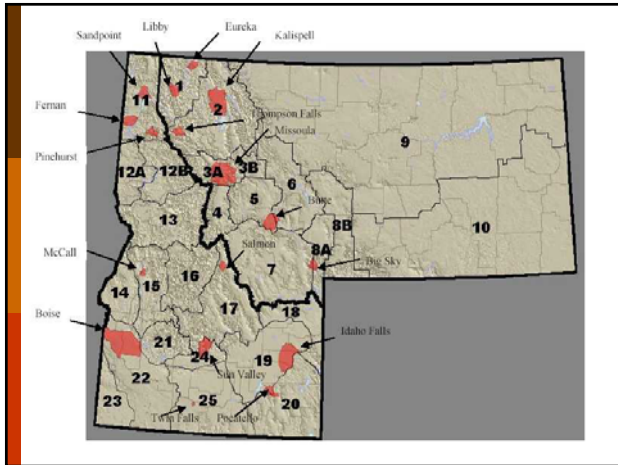
- ▣ Fires are allowed when conducted in accordance with a burn permit or burn plan
- ▣ Those who wish to burn shall meet all conditions set forth in the Montana/Idaho Airshed Group for smoke management

Montana/Idaho Airshed Group

- ▣ Authorization
 - Meteorologist issues daily burn recommendations
 - Based on smoke dispersion, burn data, and air quality data
- ▣ Benefits of Program
 - Public health protection
 - Reduced wildfire risk
 - Ecosystem and wildlife health
 - Visibility improvement

www.smokemu.org





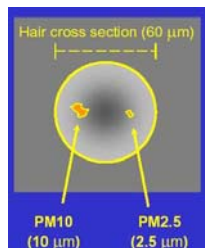
Why We Need To Practice Good Smoke Management

- ▣ Protect Public Health
 - Particulates And Toxics
 - Visibility Issues
- ▣ Protect Burn Tool
 - Too Many Problems May Lead To Increased Regulations/Restrictions



Particulate Matter NAAQS

- ▣ PM10
 - annual: $50 \mu\text{g}/\text{m}^3$
 - 24-hr: $150 \mu\text{g}/\text{m}^3$
- ▣ PM2.5
 - annual: $15 \mu\text{g}/\text{m}^3$
 - 24-hr: $65 \mu\text{g}/\text{m}^3$



Sensitive Populations



- ▣ Children
- ▣ Elderly
- ▣ Persons with respiratory or heart conditions

These people represent 40% of the population

Factors that Affect Smoke Generation and Dispersion

- ▣ Dry, Well-aerated Fuel = Less Smoke
- ▣ Atmosphere must be actively heating
 - Generally between 10 AM and 2 PM
- ▣ Inversions trap smoke close to ground
- ▣ Transport winds aloft necessary to carry smoke away
- ▣ Surface winds must be less than 10-15 mph



Proper Burning Basics



- Use alternatives to burning to dispose of material whenever possible
- Check with DEQ about air quality conditions and any burn restrictions
- Never leave fire unattended and have fire suppression equipment available
- Burn during the middle of the day when ventilation is generally good
- Burn when fuels are dry and well aerated so the fire is hot, yet manageable

Vegetation Management: To Burn or Not to Burn

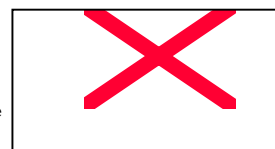
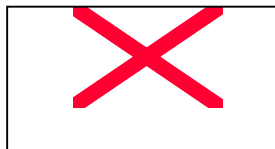
- ▣ Minimize burning through better planning, reuse, or recycling
- ▣ Utilize alternatives when possible
- ▣ Burning is an effective tool for vegetation management

Consider Alternatives to Burning

- ▣ Non-burning alternatives are broadly defined as treatment employing manual, mechanical, chemical, or animal methods to address the management of vegetation or fuel loads.

DEQ Burn Bans

- ▣ Used sparingly when two conditions exist
 - Elevated pollution levels
 - Forecasts show little improvement
- ▣ No Open burning allowed
 - This authority is enforceable
- ▣ Emergency authority
 - $PM_{2.5}$ 80 $\mu g/m^3$ 1-hr average





Before you Burn

- Follow the Montana/Idaho Airshed Group
 - www.smokemu.org
- Contact local DEQ office to obtain additional information (dispersion, local air quality)
- Call local DEQ office prior to burning
- Watch For Burn Ban Announcements Locally
 - Call DEQ: Pocatello 236-6160
 - DEQ AQI hotline 236-6173
 - Access DEQ Website www.deq.idaho.gov
 - Local News Media

Questions?